federal register

THURSDAY, JANUARY 31, 1974

WASHINGTON, D.C.

Volume 39 ■ Number 22

PART II

ENVIRONMENTAL PROTECTION AGENCY

■

BEET SUGAR PROCESSING POINT SOURCE SUBCATEGORY

Effluent Guidelines and Standards

Title 40—Protection of the Environment

CHAPTER I—ENVIRONMENTAL PROTECTION AGENCY

SUBCHAPTER N—EFFLUENT GUIDELINES AND STANDARDS

PART 409—SUGAR PROCESSING POINT SOURCE CATEGORY

Beet Sugar Processing Subcategory

On August 22, 1973 notice was published in the FEDERAL REGISTER (38 FR 22610) that the Environmental Protection Agency (EPA or Agency) was proposing effluent limitations guidelines for existing sources and standards of performance and pretreatment standards for new sources within the beet sugar processing subcategory of the sugar processing category of point sources. The purpose of this notice is to establish final effluent limitations guidelines for existing sources and standards of performance and pretreatment standards for new sources in the beet sugar processing subcategory of the sugar processing category of point sources, by amending 40 CFR Chapter I, Subchapter N, to add a new Part 409. This final rulemaking is promulgated pursuant to sections 301, 304 (b) and (c), 306 (b) and (c), 307(c) and 316(b) of the Federal Water Pollution Control Act, as amended (the Act); 33 U.S.C. 1251, 1311, 1314 (b) and (c), 1316 (b) and (c), 1317(c), and 1326(c); 86 Stat. 816 et seq.; Pub. L. 92-500.

In addition, the EPA is simultaneously proposing a separate provision which appears in the proposed rules section of the FEDERAL REGISTER, stating the application of the limitations and standards set forth below to users of publicly owned treatment works which are subject to pretreatment standards under section 307(b) of the Act. The basis of that proposed regulation is set forth in the associated notice of proposed rulemaking.

The legal basis, methodology, and factual conclusions which support promulgation of this regulation were set forth in substantial detail in the notice of public review procedures published August 6, 1973 (38 FR 21202) and in the notice of proposed rulemaking for the beet sugar processing subcategory. In addition, the regulation as proposed was supported by two other documents: (1) The document entitled "Development Document for Proposed Effluent Limitations Guidelines and New Source Performance Standards for the Beet Sugar Segment of the Sugar Processing Point Source Category" (August 1973) and (2) the document entitled "Economic Analysis of Proposed Effluent Guidelines, Beet Sugar Processing Industry" (August 1973). Both of these documents were made available to the public and circulated to interested persons at approximately the time of publication of the notice of proposed rulemaking.

Interested persons were invited to participate in the rulemaking by submitting written comments within 30 days from the date of publication and were given an additional 30 days within which to comment as a result of an extension of the comment period. Prior public participation in the form of solicited comments and responses from the States, Federal agencies, and other interested parties were described in the preamble to the proposed regulation. The EPA has considered carefully all of the comments received and a discussion of these comments with the Agency's response thereto follows in this document.

The regulation as promulgated contains significant departures from the proposed regulation. The following discussion outlines the reasons why these changes were made and why other suggested changes were not made.

(a) *Summary of comments.* The following responded to the request for comments which was made in the preamble to the proposed regulation: U.S. Beet Sugar Association, American Crystal Sugar Company, The Amalgamated Sugar Company, Monitor Sugar Company, Great Western Sugar Company, Michigan Sugar Company, Holly Sugar Corporation, Colorado Water Quality Control Commission, Natural Resources Defense Council, Inc., Illinois Environmental Protection Agency, Great Western Sugar Company, United States Water Resources Council, U.S. Department of Transportation, U.S. Coast Guard, Michigan Department of Natural Resources, EPA Region VIII, U.S. Department of Commerce, U.S. Department of the Treasury, U.S. Atomic Energy Commission, Union Sugar Division of Consolidated Foods Corporation, Utah-Idaho Sugar Company, Colorado Department of Natural Resources, Effluent Standards and Water Quality Information Advisory Committee, Wisconsin Department of Natural Resources, and the U.S. Department of the Interior.

Each of the comments received was carefully reviewed and analyzed. The following is a summary of the significant comments and EPA's response to those comments.

(1) It has been strongly contended by commenters that the beet sugar processing industry should not be a single logical category for the establishment of effluent limitations guidelines because such factors as climate, age, and size of plant are purported to demand a different division of the industry.

Even though all plants, partially or fully, utilize land for disposal and/or control of beet sugar processing waste waters, individual conditions are acknowledged to affect application of a complete land based technology. Indeed some of these factors could be of importance for possible segmentation of the industry, and have been appropriately considered. The proposed effluent limitations guidelines for July 1, 1983, have been amended to reflect segmentation of the industry based on plant size, and soil filtration characteristics. Age of plant has an influencing, but undeterminable effect on pollution control technology. Age is not judged an important enough factor affecting pollution control technology to justify segmentation of the industry on this parameter alone.

(2) Another of the key issues which was raised in response to the proposed regulation was the possible unavailability of suitable land to meet the 1983 effluent limitations guidelines.

It is the position of EPA that sufficient land is generally available within a reasonable distance from a plantsite to permit no discharge of process waste water pollutants to navigable waters. Use of this land for waste disposal purposes is generally economically feasible within the time limitations for compliance with the regulation.

The importance of the issue has been nearly eliminated with the segmentation of the industry adopted for establishment of effluent limitations guidelines to be met by July 1, 1983.

(3) Commenters expressed concern that malodorous conditions could result from increased use of land to dispose of beet sugar processing waste water.

Potential creation of odors from beet sugar processing wastes, as well as from many other types of wastes, is a long-standing, commonly occurring problem in the handling, treatment, and disposal of waste waters. The odor producing potential largely exists within the industry as a result of present practices to control most offensive wastes. Although odors may not be eliminated by present technology, they can be significantly minimized by currently known and widely practiced techniques. Therefore, the implementation of this regulation will not result in significant new odor problems or in substantial aggravation of odor problems which may exist within the industry today.

(4) Commenters were concerned that fogging resulting from evaporative cooling of barometric condenser water may present a visibility problem at some locations.

Any problems of this type which do exist are isolated to a very few plant locations. The potential for fogging cannot be directly related to water pollution control requirements, as one of the greatest possible sources for fogging originates from emissions of vapors and particulate material from beet pulp driers. Since methods are available and in use for minimization and control of the problem, it is anticipated that the regulation should not create material fogging problems or substantially increase present fogging levels.

(5) Some commenters maintained that proper consideration has not been given in the development of the regulation to energy requirements attendant to utilization of water pollution control technology.

Energy requirements necessary for production and water pollution control purposes were identified in the preamble to the regulation as proposed (38 FR 22610), and are verified by calculations based on generally acceptable engineering practice, actual field data, and industry-supplied information. For the most part, any real increase in the con-

sumption of energy results from the use of aerators for the control of odors rather than for intended reduction of pollutants in process waste water. The devices, where needed, are largely in place and no dramatic capital costs or energy increases are attributable to any increased need for such equipment which might be alleged to result from compliance with the regulation.

(6) Comments were received which suggested elimination of thermal discharge limitations guidelines proposed for barometric condenser water on the basis that the need for such effluent limitations guidelines has not been evidenced.

Heated barometric condenser water, without control, represents a potential for thermal pollution of receiving waters, and as such, is judged an important pollutant parameter. It may be successfully reduced technologically and economically as presently demonstrated in the industry. The temperature of barometric condenser water is quite variable and may range as high as 65°C (149°F) depending upon intake water temperature, water conservation practices, and production factors. Temperature of water which is reasonably efficient and acceptable for use for barometric condensing operations has been reported by industry personnel to be between 20°C–25°C (68°F–77°F) varying with individual conditions. Maximum temperature limitation for barometric condenser water of 32°C (90°F) is technologically justified, aside from production factors, and has been incorporated into the final regulation.

(7) The expression of the effluent load limitation in terms of amount of pollutants per unit of weight of production of refined sugar was questioned in the comments. It was suggested that the pollutant load limitation be stated as an amount of pollutants per unit of weight of raw beets processed and beets sliced. The industry maintains that the latter limitation basis is more directly related to total pollutant load as it is traditional and readily understandable in the industry.

Expression of effluent limitations guidelines in terms of amount of pollutants per unit weight of production is deemed to present a uniform, accurate, and generally applicable method for measurement of process waste water pollutants particularly as derived from barometric condensing operations. The effluent limitations guidelines are based upon technology applicable and demonstrated for control of BOD5 resulting from barometric condensing operations.

The revised regulation which allows a controlled discharge of composite waste in both 1977 and 1983 permits flexibility in reaching this established effluent limitation through alternative demonstrated technologies. Additional effluent limitation parameters (TSS and fecal coliform bacteria) are necessary to be included in such cases where composite waste water discharges may result; therefore in view of the additional flexibility permitted for compliance with the effluent limitation guidelines, modification of the method of effluent load limitations is not justified. Furthermore, expression of the effluent limitations on the recommended basis of unit weight of product has general application as compared to other methods e.g. plants utilizing an "extended use" campaign for processing thick juice where concurrent slicing of beets is not practiced. The recommended measure is readily and generally usable.

(8) Concern was expressed with regard to the effects of increased waste water disposal by application to land on the consumption of water and State water rights.

With respect to these issues, it is noted that all beet sugar processing plants presently within the United States utilize land for disposal of process waste water through soil filtration. In examining present plants in the western States where water consumption is an important consideration, it is apparent that consumptive water use results from present practices through containment of waste waters by in-place waste water holding facilities. While the regulation would result in some additional consumptive use, it should not result in an overly dramatic increase. It has been calculated on the basis of the effluent limitations guidelines resulting from discharge of barometric condenser water only for the ten plants in one state that the potential increase in total water consumption (soil filtration and evaporation) which may occur from the implementation of the regulation could be no significant increase to a maximum of 35 percent. If an increase of 35 percent were to occur the additional total annual increase for all ten plants for additional water rights based upon the cost of water at $200 per acre-foot would be $380,000 maximum. Similar calculations have been made based upon the complete land disposal of all process waste waters for the ten plants, and it is indicated that the potential increase could be as low as 13 percent which might result in $225,000 additional annual cost or as high as 75 percent which might result in $825,000 additional annual costs. These costs tend to fall evenly on the ten plants involved. They will tend to increase the economic burden on those plants, however, they do not alter any of the conclusions reached previously in the economic impact analysis for this industry. To the extent that any legal issue may arise with respect to a purported conflict between Federal and state law, it is the determination of the EPA Office of General Counsel that the "Federal doctrine of preemption" requires implementation of the regulations enacted pursuant to the Act.

(9) Commenters questioned the economic and technological wisdom of universally requiring "no discharge" of process waste water pollutants to navigable waters in all instances by July 1, 1983.

Many factors are acknowledged to affect and feasibly determine the economic and engineering application of no discharge of process waste water pollutants from all plants through land application of process waste waters. These factors have received proper evaluation in considering the costs vs. pollutant reduction benefits relationships resulting from various available pollution control technologies. Re-evaluation of these relationships in response to concern expressed by some commenters, has resulted in revisions to the July 1, 1983 regulation incorporating segmentation of the industry. The revisions greatly mitigate economic and technological restraints within the industy which may be expected to result from a uniform effluent limitation of no discharge of process waste water pollutants for all plants. Land disposal of all, or most, process waste waters is economically and technologically accomplishable at many plants in the industry. The technology is well demonstrated and generally economically achievable.

(10) Industry questioned the application of the land availability formula as a valid and equitable basis for determining the existence of available and suitable land for controlled waste water disposal.

This issue is now moot as the formula has been removed from the regulation.

(b) *Revision of the proposed regulation prior to promulgation.* As a result of public comments, continuing review and evaluation of the proposed regulation by EPA, the following changes have been made in the regulation.

(1) Section 409.11, *Specialized Definitions,* now includes a reference to general definitions, abbreviations, and methods of analysis in 40 CFR 401 which reduces the need for some specialized definitions in this regulation. The definition of "barometric condensing operations" was defined because the term has now been incorporated in the regulation and the term "product" has been defined to maintain clarity in the regulation.

(2) An important change made in the effluent limitation guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available permits an effluent discharge of 2.2 kg BOD5/kkg of refined sugar (2.2 lb BOD5/1000 lb refined sugar) from beet sugar process waste waters as attributable to barometric condensing operations alone or together with any other beet sugar processing operation.

Under the revised effluent limitation guidelines the economic analysis for the industry indicates that only three to five plants in the industry might have financial difficulty in meeting the limit of 2.2 kg BOD5/kkg of refined sugar. Three of these plants have indicated through permit applications that they in fact would be able to achieve this level of control by 1977. This reduces the potential closures for 1977 to one to two plants representing approximately 1.0 to 3.0 percent of industry capacity and about 50 to 100 full time employees. This constitutes a substantial reduction from the four to ten potential closures projected for the 1977 requirements as originally proposed.

The economic analysis indicates that one to two additional plants could have financial difficulty in meeting the 1983 guidelines. These plants are larger than 2300 tons sliced/day and thus are not exempt from the zero discharge requirement. While they have favorable soil conditions they are still only marginally profitable and are likely to incur high land cost for enlargement of their holding ponds. These plants represent from 2.0 to 3.5 percent of industry capacity and from 50 to 100 full time employees.

This provides ample justification for the change in the regulation which substantially improves the economic outlook of the industry.

The intent in establishing flexibility in the effluent limitations guidelines for 1977 is not to permit a plant to discharge process waste water from barometric condensing operations as well as composite process waste water but the plant is to use one alternative or the other, as specified in Section 409.12, for the totality of operations at the plant.

(3) Another important change made in the effluent limitation guidelines representing the degree of effluent reduction attainable by the application of the best available control technology economically achievable permits an effluent discharge of 1.3 kg BOD5/kkg of refined sugar (1.3 lb BOD5/1000 lb refined sugar) from beet sugar process waste waters as attributable to barometric condensing operations alone or together with any other beet sugar processing operation for plants having a sugar beet processing capacity of 2090 kkg (2300 tons) per day of beets sliced or less, or where soil filtration rate has been determined or ascertained to be not greater than 0.159 cm/day (1/16 in/day). All beet sugar processing plants not meeting either or both of the above criteria would be required to achieve no discharge of process waste water pollutants to navigable waters.

The rationale for segmentation of the industry for purposes of establishing effluent limitations guidelines for July 1, 1983 on the basis of plant size and soil filtration rate is essentially economic. The plants expected to incur the greatest economic impact from the proposed regulations are those which are relatively small. The plant capacity chosen as a basis for segmentation is distinguishing within the size distribution for plants presently within the industry. The soil filtration rate criteria of 0.159 cm/day (1/16'' per day) serves to further reduce the most adverse economic impact anticipated for plants located in areas where land for disposal of process waste water disposal exhibits exceedingly low permeability characteristics. No plants within the industry with a capacity less than a sugar beet processing capacity of 2040 kkg (2300 tons) per day of beet sliced presently accomplish no discharge of process waste water pollutants to navigable waters through land disposal of process waste waters. The ability to achieve the stipulated effluent limitations established for 1983 has been demonstrated within the industry, and is judged to constitute the best available control technology economically achievable within physical and economic restraints.

(4) An effluent limitation for TSS has now been included for permitted composite discharges which result from a mixture of the waste stream from barometric condensing operations and any other beet sugar processing operation.

While the TSS limitation was not included in effluent limitations guidelines in the proposed regulation, it has been shown to be necessary for composite wastes. This is true because of the very likely possibility of solids discharge from flume water and other solids producing processes. TSS levels in barometric condenser water are negligible and are subject to the same methods and procedures for control as BOD5. Generally since both BOD5 and TSS are derived from the process of concentration of sugar-laden solutions, control of BOD5 will likewise result in control of corresponding TSS levels in barometric condenser water. The limitation for TSS corresponding to that for BOD5 may be expeditiously accomplished, as presently demonstrated within the industry, for composite waste through effective solids removal devices.

(5) The heat limitation has been modified to include a maximum temperature limit of 32°C (90°F).

The temperature of water suitable for reuse in the barometric condenser water process is variable depending upon water use, reuse, conservation practices, and production-related factors. However, the normal temperature requirements for effective and efficient operation of the sugar solution concentrating and crystallizing processes are usually in the range of 20°C–25°C (68°F–77°F) or cooler. A maximum temperature limitation of 32°C (90°F) is technologically accomplishable and justified.

The same considerations of temperature apply to composite wastes and the 32°C (90°F) limitation should be equally applicable. Where composite discharge of process waste water occurs, 32°C (90°F) for composite waste discharge generally presents no difficulty to meet since temperature reduction can usually be technologically accomplished principally through a combination of waste waters from barometric condensing operations together with other wastes.

(6) An additional effluent limitation guideline has been established regulating the discharge of fecal coliform bacteria when the discharge from a plant contains waste water other than barometric condenser water only. This is necessary to ensure that the composite waste water has been properly treated. It is considered to be unnecessary for discharges derived only from barometric condenser water based on available data which do not indicate that barometric condenser water contains pathogenic organisms. Substantial disinfection of barometric condenser water occurs through the heat producing process. Creating separate requirements for these two possible waste discharges will eliminate the need for monitoring of fecal coliform bacteria at many plants. This should result in an attendant cost saving to the operator at those plants discharging only barometric condenser water.

(c) *Economic impact.* For the beet sugar processing industry, the first option which would leave the introduction of pollutants unregulated is appropriate. As described in the Development Document, the process waste waters from the beet sugar processing subcategory do not contain process waste water pollutants in sufficient concentrations to interfere with the operation of publicly owned treatment works, pass through such works untreated or inadequately treated or otherwise be incompatible with such treatment works. Therefore, no condition is deemed to preclude the discharge of process waste waters from the beet sugar processing subcategory to publicly owned treatment works.

(d) *Cost-benefit analysis.* The detrimental effects of the constituents of process waste waters not discharged by point sources within the beet sugar processing subcategory of the sugar processing point source category are discussed in Section VI of the report entitled "Development Document for Effluent Limitations Guidelines and Standards of Performance for New Sources Beet Sugar Processing Subcategory of the Sugar Processing Point Source Category" (January, 1974). It is not feasible to quantify in economic terms, particularly on a national basis, the costs resulting from the discharge of these pollutants to our Nation's waterways. Nevertheless, as indicated in Section VI, the pollutants discharged have substantial and damaging impacts on the quality of water and therefore on its capacity to support healthy populations of wildlife, fish and other aquatic wildlife and on its suitability for industrial, recreational and drinking water supply uses.

The total cost of implementing the effluent limitations guidelines includes the direct capital and operating costs of the pollution control technology employed to achieve compliance and the indirect economic and environmental costs identified in Section VIII and in the supplementary report entitled "Economic Analysis of Proposed Effluent Guidelines Beet Sugar Processing Industry" (August, 1973). Implementing the effluent limitations guidelines will substantially reduce the environmental harm which would otherwise be attributable to the continued discharge of polluted waste waters from existing and newly constructed plants in the beet sugar processing industry. The Agency believes that the benefits of thus reducing the pollutants discharged justify the associated costs which, though substantial in absolute terms, represent a relatively small percentage of the total capital investment in the industry.

(e) Publication of information on processes, procedures, or operating methods which result in the elimination or reduction of the discharge of pollutants.

In conformance with the requirements of section 304(c), a manual entitled, "Development Document for Effluent Limitations Guidelines and Standards of Performance for New Sources Beet Sugar Processing Subcategory of the Sugar Processing Point Source Category" has been published and is available for purchase from the Government Printing Office, Washington, D.C. 20401 for a nominal fee.

(f) *Final rulemaking.* In consideration of the foregoing, 40 CFR Chapter I, Subchapter N is hereby amended by adding a new Part 409, Sugar Manufacturing Point Source Category, to read as set forth below. This final regulation is promulgated as set forth below and shall be effective April 1, 1974.

Dated: January 18, 1974.

RUSSELL E. TRAIN,
Administrator.

Subpart A—Beet Sugar Processing Subcategory

Sec.

409.10 Applicability; description of the beet sugar processing subcategory.
409.11 Specialized definitions.
409.12 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.
409.13 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.
409.14 [Reserved]
409.15 Standards of performance for new sources.
409.16 Pretreatment standards for new sources.

AUTHORITY: Secs. 301, 304 (b) and (c), 306 (b) and (c), 307(c) and 316(b) of the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251, 1311, 1314 (b) and (c), 1316 (b) and (c), 1317(c) and 1326(c)), 86 Stat. 816 et seq., Pub. L. 92-500.

Subpart A—Beet Sugar Processing Subcategory

§ 409.10 Applicability; description of the beet sugar processing subcategory.

The provisions of this subpart are applicable to discharges resulting from any operation attendant to the processing of sugar beets for the production of sugar.

§ 409.11 Specialized definitions.

For the purpose of this subpart:

(a) Except as provided below, the general definitions, abbreviations and methods of analysis set forth in part 401 of this chapter shall apply to this subpart.

(b) The term "barometric condensing operations" shall mean those operations or processes directly associated with or related to the concentration and crystalization of sugar solutions.

(c) The term "product" shall mean crystallized refined sugar.

§ 409.12 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best practicable control technology currently available; provided however, that a discharge by a point source may be made in accordance with the limitations set forth in either paragraph (a) of this section exclusively, or paragraph (b) of this section exclusively, below:

(a) The following limitations establish the maximum permissible discharge of process waste water pollutants when the process waste water discharge results from barometric condensing operations only.

Effluent characteristic	Effluent limitations: Maximum for any 1 day	Effluent limitations: Average of daily values for 30 consecutive days shall not exceed
Metric units (kg/kkg of product)		
BOD5	3.3	2.2
pH	Within the range of 6.0 to 9.0.	
Temperature	Temperature not to exceed the temperature of cooled water acceptable for return to the heat producing process and in no event greater than 32° C.	
English units (lb/1000 lb of product)		
BOD5	3.3	2.2
pH	Within the range of 6.0 to 9.0.	
Temperature	Temperature not to exceed the temperature of cooled water acceptable for return to the heat producing process and in no event greater than 90° F.	

(b) The following limitations establish the maximum permissible discharge of process waste water pollutants when the process waste water discharge results, in whole or in part, from barometric condensing operations and any other beet sugar processing operation.

Effluent characteristic	Effluent limitations: Maximum for any 1 day	Effluent limitations: Average of daily values for 30 consecutive days shall not exceed
Metric units (kg/kkg of product)		
BOD5	3.3	2.2
TSS	3.3	2.2
pH	Within the range 6.0 to 9.0.	
Fecal coliform	Not to exceed MPN of 400/100 ml at any time.	
Temperature	Not to exceed 32° C.	
English units (lb/1000 lb of product)		
BOD5	3.3	2.2
TSS	3.3	2.2
pH	Within the range 6.0 to 9.0.	
Fecal coliform	Not to exceed MPN of 400/100 ml at any time (not typically expressed in English units).	
Temperature	Not to exceed 90° F.	

§ 409.13 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best available technology economically achievable.

(a) The following limitations establish the quantity or quality of pollutants or pollutant properties which may be discharged by a point source where the sugar beet processing capacity of the point source does not exceed 2090 kkg (2300 tons) per day of beets sliced and/or the soil filtration rate in the vicinity of the point source is less than or equal to 0.159 cm (1/16 in) per day; provided however, that a discharged by a point source may be made in accordance with the limitations set forth in either paragraph (a)(1) exclusively, or paragraph (a)(2) of this section exclusively.

(1) The following limitations establish the maximum permissible discharge of process waste water pollutants when the process waste water discharge results from barometric condensing operations only.

Effluent characteristic	Effluent limitations: Maximum for any one day	Effluent limitations: Average of daily values for 30 consecutive days shall not exceed
Metric units (kg/kkg of product)		
BOD5	2.0	1.3
pH	Within the range 6.0 to 9.0.	
Temperature	Temperature not to exceed the temperature of cooled water acceptable for return to the heat producing process and in no event greater than 32° C.	
English units (lb/1000 lb of product)		
BOD5	2.0	1.3
pH	Within the range 6.0 to 9.0.	
Temperature	Temperature not to exceed the temperature of cooled water acceptable for return to the heat producing process and in no event greater than 90° F.	

(2) The following limitations establish the maximum permissible discharge of process waste water pollutants when the process waste water discharge results, in whole or in part, from barometric condensing operations and any other beet sugar processing operation.

Effluent characteristic	Effluent limitations: Maximum for any 1 day	Effluent limitations: Average of daily values for 30 consecutive days shall not exceed
Metric units (kg/kkg of product)		
BOD5	2.0	1.3
TSS	2.0	1.3
pH	Within the range 6.0 to 9.0.	
Fecal coliform	Not to exceed MPN of 400/100 ml at any time.	
Temperature	Not to exceed 32° C.	
English units (lb/1000 lb of product)		
BOD5	2.0	1.3
TSS	2.0	1.3
pH	Within the range 6.0 to 9.0.	
Fecal coliform	Not to exceed MPN of 400/100 ml at any time (not typically expressed in English units).	
Temperature	Not to exceed 90° F.	

(b) The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this regulation, which may be discharged by a point source in all instances not specified under the provisions of (a) above: there shall be no discharge of process waste water pollutants to navigable waters.

§ 409.14 [Reserved]

§ 409.15 Standards of performance for new sources.

The following standards of performance establish the quantity or quality of pollutants or pollutant properties which may be discharged by a point source subject to the provisions of this subpart: there shall be no discharge of process waste water pollutants to navigable waters.

§ 409.16 Pretreatment standards for new sources.

The pretreatment standards under section 307(c) of the Act for a source within the beet sugar processing subcategory, which is a user of a publicly owned treatment works (and which would be a new source subject to section 306 of the Act, if it were to discharge pollutants to the navigable waters), shall be the standard set forth in Part 128 of this chapter, except that, for the purpose of this section, § 128.133 of this chapter shall be amended to read as follows:

In addition to the prohibitions set forth in § 128.131, the pretreatment standard for incompatible pollutants introduced into a publicly owned treatment works shall be the standard of performance for new sources specified in § 409.15 of this chapter; *Provided* That, if the publicly owned treatment works which receives the pollutants is committed, in its NPDES permit, to remove a specified percentage of any incompatible pollutant, the pretreatment standard applicable to users of such treatment works shall, except in the case of standards providing for no discharge of pollutants, be correspondingly reduced in stringency for that pollutant.

[FR Doc.74-2155 Filed 1-30-74;8:45 am]

ENVIRONMENTAL PROTECTION AGENCY

[40 CFR Part 409]

SUGAR PROCESSING POINT SOURCE CATEGORY, BEET SUGAR PROCESSING SUBCATEGORY

Application of Effluent Limitations Guidelines for Existing Sources to Pretreatment Standards for Incompatible Pollutants

Notice is hereby given pursuant to sections 301, 304 and 307(b) of the Federal Water Pollution Control Act, as amended (the Act) 33 U.S.C. 1251, 1311, 1314 and 1317(b); 86 Stat. 816 et seq.; Pub. L. 92-500, that the proposed regulation set forth below concerns the application of effluent limitations guidelines for existing sources to pretreatment standards for incompatible pollutants. The purpose of this notice is to establish final effluent limitations guidelines for existing sources and standards of performance and pretreatment standards for new sources in the beet sugar processing subcategory of the sugar processing category of point sources, by amending 40 CFR Chapter I, Subchapter N, to add a new Part 409. The regulation is intended to be complementary to the general regulation for pretreatment standards set forth at 40 CFR 128. The general regulation was proposed July 19, 1973 (38 FR 19236), and published in final form on November 8, 1973 (38 FR 30982).

The proposed regulation is also intended to supplement a final regulation being simultaneously promulgated by the Environmental Protection Agency (EPA or Agency) which provides effluent limitations guidelines for existing sources and standards of performance and pretreatment standards for new sources within the beet sugar processing subcategory of the sugar processing point source category. The latter regulation applies to the portion of a discharge which is directed to the navigable waters. The regulation proposed below applies to users of publicly owned treatment works which fall within the description of the point source category to which the guidelines and standards (40 CFR Part 409) promulgated simultaneously apply. However, the proposed regulation applies to the introduction of incompatible pollutants which are directed into a publicly owned treatment works, rather than to discharges of pollutants to navigable waters.

The general pretreatment standard divides pollutants discharged by users of publicly owned treatment works into two broad categories: "compatible" and "incompatible." Compatible pollutants are generally not subject to pretreatment standards. (See 40 CFR 128.110 (State or local law) and 40 CFR 128.131 (Prohibited wastes) for requirements which may be applicable to compatible pollutants). Incompatible pollutants are subject to pretreatment standards as provided in 40 CFR 128.133, which provides as follows:

> In addition to the prohibitions set forth in § 128.131, the pretreatment standard for incompatible pollutants introduced into a publicly owned treatment works by a major contributing industry not subject to Section 307(c) of the Act shall be, for sources within the corresponding industrial or commercial category, that established by a promulgated effluent limitations guidelines defining best practicable control technology currently available pursuant to Sections 301(b) and 304(b) of the Act; provided that, if the publicly owned treatment works which receives the pollutants is committed, in its NPDES permit, to remove a specified percentage of any incompatible pollutant, the pretreatment standard applicable to users of such treatment works shall be correspondingly reduced for that pollutant; and provided further that when the effluent limitations guidelines for each industry is promulgated, a separate provision will be proposed concerning the application of such guidelines to pretreatment.

The regulation proposed below is intended to implement that portion of § 128.133, above, requiring that a separate provision be made stating the application to pretreatment standards of effluent limitations guidelines based upon best practicable control technology currently available.

Questions were raised during the public comment period on the proposed general pretreatment standard (40 CFR Part 128) about the propriety of applying a standard based upon best practicable control technology currently available to all plants subject to pretreatment standards. In general, EPA believes the analysis supporting the effluent limitations guidelines is appropriate to support the application of those standards to users of publicly owned treatment works. However, to ensure that those standards are appropriate in all cases, EPA now seeks additional comments focusing upon the application of effluent limitations guidelines to users of publicly owned treatment works.

Section 409.15 of the proposed regulation for point sources within the beet sugar processing subcategory (August 22, 1973; 38 FR 22610), contained the proposed pretreatment standard for new sources. The regulation promulgated simultaneously herewith contains § 409.16 which states the applicability of standards of performance for purposes of pretreatment standard for new sources.

A preliminary Development Document was made available to the public at approximately the time of publication of the notice of proposed rulemaking and the final Development Document entitled "Development Document for Effluent Limitations Guidelines and Standards of Performance for New Sources BEET SUGAR Processing Subcategory of the Sugar Processing Point Source Category" is now being published. The economic analysis report entitled "Economic Analysis of Proposed Effluent Guidelines Beet Sugar Processing Industry" was made available at the time of proposal. Copies of the final Development Document and economic analysis report will continue to be maintained for inspection and copying during the comment period at the EPA Information Center, Room 227, West Tower, Waterside Mall, 401 M Street, SW., Washington, D.C. Copies will also be available for inspection at EPA regional offices and at State water pollution control agency offices. Copies of the Development Document may be purchased from the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402. Copies of the economic analysis report will be available for purchase through the National Technical Information Service, Springfield, Virginia 22150.

On June 14, 1973, the Agency published procedures designed to insure that, when certain major standards, regulations, and guidelines are proposed, an explanation of their basis, purpose and environmental effects is made available to the public. (38 FR 15653) The procedures are applicable to major standards, regulations and guidelines which are proposed on or after December 31, 1973, and which either prescribe national standards of environmental quality or require national emission, effluent or performance standards or limitations.

The Agency determined to implement these procedures in order to insure that the public was provided with background information to assist it in commenting on the merits of a proposed action. In brief, the procedures call for the Agency to make public the information available to it delineating the major environmental effects of a proposed action, to discuss the pertinent nonenvironmental factors affecting the decision, and to explain the viable options available to it and the reasons for the option selected.

The procedures contemplate publication of this information in the FEDERAL REGISTER, where this is practicable. They provide, however, that where such publication is impracticable because of the length of these materials, the material may be made available in an alternate format.

The Development Document referred to above contains information available to the Agency concerning the major environmental effects of the regulation proposed below. The information includes: (1) The identification of pollutants present in waste waters results from the manufacture of beet sugar, the characteristics of these pollutants, and the degree of pollutant reduction attainable through implementation of the proposed standard; and (2) the anticipated effects on other aspects of the environment (including air, subsurface waters, solid waste disposal, land use, and noise) of the treatment technologies available to meet the standard proposed.

The Development Document and the economic analysis report referred to above also contain information available to the Agency regarding the estimated cost and energy consumption implications of those treatment technologies and the potential effects of those costs on the price and production of beet sugar. The two reports exceed, in the aggregate, 100 pages in length and contain a substantial number of charts, diagrams and tables. It is clearly impracticable to publish the material contained in these documents in the FEDERAL REGISTER. To the extent possible, significant aspects

of the material have been presented in summary form in the preamble to the proposed regulation containing effluent limitations guidelines, new source performance standards and pretreatment standards for new sources within the sugar processing category (38 FR 22610; August 22, 1973). Additional discussion is contained in the analysis of public comments on the proposed regulation and the Agency's response to those comments. This discussion appears in the preamble to the promulgated regulation (40 CFR Part 409) which currently is being published in the Rules and Regulations section of the FEDERAL REGISTER.

The options available to the Agency in establishing the level of pollutant reduction attainable through the best practicable control technology currently available, and the reasons for the particular level of reduction selected are discussed in the documents described above. In applying the effluent limitations guidelines to pretreatment standards for the introduction of incompatible pollutants into municipal systems by existing sources in the beet sugar processing subcategory, the Agency has, essentially, three options. The first is to declare that the guidelines do not apply. The second is to apply the guidelines unchanged. The third is to modify the guidelines to reflect: (1) Differences between direct dischargers and plants utilizing municipal systems which affect the practicability of the latter employing the technology available to achieve the effluent limitations guidelines; or (2) characteristics of the relevant pollutants which require higher levels of reduction (or permit less stringent levels) in order to insure that the pollutants do not interfere with the treatment works or pass through them untreated. For the beet sugar processing subcategory, the first option which would leave the introduction of pollutants unregulated is appropriate. As described in the Development Document, the process waste waters from the beet sugar processing subcategory do not contain process waste water pollutants in sufficient concentrations to interfere with the operation of publicly owned treatment works, pass through such works untreated or inadequately treated or otherwise be incompatible with such treatment works. Therefore, no condition is deemed to preclude the discharge of process waters from the beet sugar processing subcategory to publicly owned treatment works.

Interested persons may participate in this rulemaking by submitting written comments in triplicate to the EPA Information Center, Environmental Protection Agency, Washington, D.C. 20460, Attention: Mr. Philip B. Wisman. Comments on all aspects of the proposed regulations are solicited. In the event comments are in the nature of criticisms as to the adequacy of data which is available, or which may be relied upon by the Agency, comments should identify and, if possible, provide any additional data which may be available and should indicate why such data is essential to the development of the regulations. In the event comments address the approach taken by the Agency in establishing pretreatment standards for existing sources, EPA solicits suggestions as to what alternative approach should be taken and why and how this alternative better satisfies the detailed requirements of sections 301, 304 and 307(b) of the Act.

A copy of all public comments will be available for inspection and copying at the EPA Information Center, Room 227, West Tower, Waterside Mall, 401 M Street, S.W., Washington, D.C. 20460. The EPA information regulation, 40 CFR Part 2, provides that a reasonable fee may be charged for copying.

In consideration of the foregoing, it is hereby proposed that 40 CFR Part 409 be amended to add § 409.14. All comments received on or before March 1, 1974, will be considered.

Dated: January 18, 1974.

RUSSELL E. TRAIN,
Administrator.

40 CFR Part 409 is proposed to be amended as follows:

§ 409.14 Pretreatment standards for existing sources.

For the purpose of pretreatment standards for incompatible pollutants established under 40 CFR 128.133, the effluent limitations guidelines set forth in 40 CFR 409.12 above shall not apply and, subject to the provisions of 40 CFR Part 128 concerning pretreatment, process waste water from this subcategory may be introduced into a publicly owned treatment works.

[FR Doc.74-2156 Filed 1-30-74;8:45 am]